AF
PATENT
450114-4609

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|---|---|---|
| Applicants | : | Toshihiko Kitazawa et al. |
| Serial No. | : | 09/319,851 |
| Filed | : | June 11, 1999 |
| For | : | VIDEO DATA MULTIPLEXER, VIDEO DATA MULTIPLEXING CONTROL METHOD, METHOD AND APPARATUS FOR MULTIPLEXING ENCODED STREAM, AND ENCODING METHOD AND APPARATUS |
| Examiner | : | Chuong T. Ho |
| Art Unit | : | 2664 |

745 Fifth Avenue
New York, NY 10151

CH
OK To Enter
10/06/04

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on August 9, 2004.

Bruno Polito, Reg. No. 38,580

Name of Applicant, Assignee or Registered Representative

Signature

August 9, 2004

Date of Signature

## SUPPLEMENTARY AMENDMENT AFTER FINAL ACTION

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Final Action mailed April 7, 2004 and Advisory Action dated

July 7, 2004, please amend the above-identified application as follows.

00210118

1

## IN THE CLAIMS

1-10. (Canceled)

11. (Original) A video data multiplexing device comprising:

a plurality of encoding means for encoding program data respectively including video data, outputting resultant encoded streams, generating statistical multiplexing data required for control using statistical multiplexing, and outputting the generated data on the same transmission channels as the encoded streams;

multiplexing means for acquiring the encoded streams and the statistical multiplexing data from the respective encoding means via the transmission channels, conducting multiplexing processing on the encoded streams and the statistical multiplexing data at a first rate greater than a data transmission rate on a transmission channel of a subsequent stage, outputting first data including the statistical multiplexing data, conducting multiplexing processing on data obtained by removing the statistical multiplexing data from the data outputted from the respective encoding means, at a second rate equal to a data transmission rate on the transmission channel of the subsequent stage, and outputting second data which does not include the statistical multiplexing data to the transmission channel of the subsequent stage; and

encoding control means for acquiring the statistical multiplexing data of the respective encoding means from the first data outputted from the multiplexing means, and conducting control using statistical multiplexing on the respective encoding means on

00210118

the basis of the statistical multiplexing data.

12. (Original) A video data multiplexing device according to claim 11, wherein the encoding means forms the encoded streams and the statistical multiplexing data respectively as packets and outputs the packets.

13. (Original) A video data multiplexing device according to claim 11, wherein the multiplexing means includes a multiplexing unit for acquiring the encoded streams and the statistical multiplexing data from the respective encoding means via the transmission channels, and multiplexing them, a first multiplexing control unit for controlling the multiplexing unit so that the first data may be outputted from the multiplexing unit at the first rate, and holding data obtained by removing the statistical multiplexing data from the first data outputted from the multiplexing unit, and a second multiplexing control unit for controlling the first multiplexing control unit so that the data held by the first multiplexing control unit may be outputted to the transmission channel of the subsequent stage at the second rate as the second data.

14. (Original) A video data multiplexing control method used in a video data multiplexing device including a plurality of encoding means for encoding program data respectively including video data and outputting encoded streams, multiplexing means for multiplexing the encoded streams outputted from controlling each of the encoding means, and encoding control means for controlling each of the encoding means, wherein control using statistical multiplexing is conducted on each of the encoding means by the encoding

control means, comprising:

a statistical multiplexing data output procedure in the encoding means for generating statistical multiplexing data required for control using statistical multiplexing, and outputting the generated data on the same transmission channel as the encoded streams are transmitted;

a multiplexing procedure in the multiplexing means for acquiring the encoded streams and the statistical multiplexing data from the respective encoding means via the transmission channels, conducting multiplexing processing on the encoded streams and the statistical multiplexing data at a first rate greater than a data transmission rate on a transmission channel of a subsequent stage, outputting first data including the statistical multiplexing data, conducting multiplexing processing on data obtained by removing the statistical multiplexing data from the data outputted from the respective encoding means, at a second rate equal to a data transmission rate on the transmission channel of the subsequent stage, and outputting second data which does not include the statistical multiplexing data to the transmission channel of the subsequent stage; and

an encoding control procedure in the encoding control means for acquiring the statistical multiplexing data of the respective encoding means from the first data outputted from the multiplexing means, and conducting control using statistical multiplexing on the respective encoding means on the basis of the statistical multiplexing data.

4

15. (Original) A video data multiplexing control method according to claim 14, wherein in the statistical multiplexing data output procedure, the statistical multiplexing data is formed as packets and outputted.

16-39. (Canceled)

## REMARKS

This Amendment is responsive to the Final Action dated April 7, 2004 and the Advisory Action dated July 7, 2004. The Amendment merely cancels rejected claims and should therefore be entered in due course.

Claims 1-39 were pending in the application. In the Final Action, claims 11-15 were allowed and claims 1-10 and 16-39 were rejected. In this Amendment, claims 1-10 and 16-39 have been canceled. Only allowed claims 11-15 remain. Accordingly, the application is in condition for allowance, which action is earnestly solicited.

If any issues remain, or if the Examiner has any further suggestions, he/she is invited to call the undersigned at the telephone number provided below.

The Examiner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account No. 50-0320.
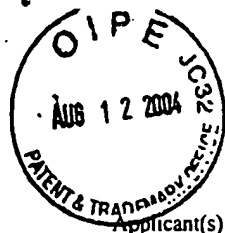
The Examiner's consideration of this matter is gratefully acknowledged.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By: _____

Bruno Polito
Reg. No. 38,580
(212) 588-0800

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|---|---|---|
| Applicant(s) | : | Toshihiko Kitazawa et al. |
| Serial No. | : | 09/319,851 |
| Filed | : | June 11, 1999 |
| For | : | VIDEO DATA MULTIPLEXER, VIDEO DATA MULTIPLEXING CONTROL METHOD, METHOD AND APPARATUS FOR MULTIPLEXING ENCODED STREAM, AND ENCODING METHOD AND APPARATUS |
| Examiner | : | Chuong T. Ho |
| Art Unit | : | 2664 |

745 Fifth Avenue
New York, NY 10151
Tel: 212-588-0800

**RECEIVED**

**AUG 1 6 2004**

**Technology Center 2600**

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith is an amendment in the above-identified application.

☒ No additional fee is required.
☐ The fee has been calculated as shown below.
☐ This is an application of a small entity under 37 CFR 1.9(f), and the amounts shown in parentheses apply.

### Claims as Amended

| (1) | (2) Claims remaining after amendment | (3) | (4) Highest number previously paid for | (5) Present extra | (6) Rate | (7) Additional Fee |
|---|---|---|---|---|---|---|
| Total claims | 5 | Minus | ** = 39 | * 0 x | $18 (9) | = $ 0.00 |
| Independent claims | 2 | Minus | *** = 10 | * 0 x | $86 (43) | = $0.00 |
| | | | Total additional fee for this amendment | | $ | 0.00 |

* If the entry in Column 2 is less than the entry in Column 4, write "0" in Column 5.
** If the highest number of total claims previously paid for is less than 20, write "20" in this space.
*** If the highest number of independent claims previously paid for is less than 3, write "3" in this space.

☐ This application contains a multiple dependent claim. The required fee of $290(145) has been previously paid ☐, or is paid herewith ☐.

☒ This response is being filed within the <u>first</u> month following the expiration of the term originally set therefor. This is a petition to request a <u>one</u> month extension of time. A check covering the cost of the petition is enclosed.

☒ A check in the amount of $110.00 is attached, which covers the cost of ☐ additional claims <u>X</u> petition for extension of time.

☐ Charge $_____ to Deposit Account No. 50-0320.

☒ Please charge any additional fees incurred by reason of this response or credit any overpayment to Deposit Account No. 50-0320.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on August 9, 2004
<u>Bruno Polito, Reg. No. 38,580</u>

Name of Applicant, Assignee or Registered Representative

_____
Signature

<u>August 9, 2004</u>
Date of Signature

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicants

By:
Bruno Polito
Reg. No. 38,580
Tel: 212-588-0800

08/12/2004 SSITHIB1 00000109 09319851
01 FC:1251                    110.00 OP

00210394